Efficiency or Refinement Planning and the PART

Section Overview:

The purpose of this section is to describe the concepts of Program Effectiveness, Program Efficiency, and how these and the other planning components in this guide relate to the Program Assessment Rating Tool (PART) being used by OMB.

While the notions of program effectiveness and efficiency are not new to government managers, they are taking on a greater role in determining future federal allocations. Formal and systematic refinement planning is more necessary than ever since government executives are being asked more frequently to provide quantifiable evidence that the work being done is actually accomplishing what it sets out to accomplish and in an efficient manner.

Senior Department Officials, the Office of Management and Budget (OMB), and Congress are using this evidence to make decisions about which federal programs should continue to be funded, which deserve increased funding, and which programs appear to be missing the mark around their intended objectives. In fact the Office of Management and Budget (OMB) uses the Program Assessment Rating Tool (PART) to systematically and consistently evaluate programs during the budgeting process. The PART is a series of questions to be answered by program managers around four key principles: Program Purpose and Design, Strategic Planning, Program Management, and Program Results.

Since the PART has become the centerpiece of the OMB budgeting review process, it is important for APHIS managers to include answers to PART questions in their program proposals. As you will see, the four key sections of the PART nicely parallel the chapters of this Planning Guide. Once you've completed much of the work already outlined in the guide, the answers to PART are much easier to address.

PART Section 1: Program Purpose and Design asks questions that can be answered once the Program Logic Model has been completed.

PART Section 2: Strategic Planning discusses many of the items discussed in the strategic planning section of the Guide, and also includes questions on some issues more closely associated with operational planning milestones and timeframes.

PART Sections 3 & 4: Program Management and Program Results focus on issues related to operational planning, including financial management, and evaluation for effectiveness and efficiencies.

What is the Difference between Effectiveness and Efficiency?

- **Effectiveness answers the question, "Does the set of program inputs and activities being performed result in the desired outcome?"**

In many cases, APHIS program managers have an intuitive sense that their program activities are making a positive difference (benefit). The difficulty can come in providing precise information as to how much of a positive difference (benefit) the work or activity is making.

Sometimes measuring effectiveness can be complicated because determining the resources that are at risk in a situation can be difficult. At times it is necessary to develop risk models that focus on a very specific set of variables (type of pest or disease, geographic area of introduction, number of potential hosts, etc.). Often these models are based on statistical methods and economic analysis that require scientists to support a set of assumptions. Assumptions around the likelihood and rate of spread for a specific pest or disease need to be made. Other questions like, "What's the potential negative impact this pest will have on national and international commerce?" need to be estimated in order to determine program effectiveness.

- **Efficiency, on the other hand, answers the question, "What's been accomplished for a given amount of resources?"**

It builds on the effectiveness metric by putting the Outcome (Benefit) into context with the Inputs (usually dollars). Efficiency is expressed in a Per Unit Cost of Inputs to Outcomes.

Challenges associated with measuring efficiency center on determining the actual costs of the inputs used to provide the desired outcome. Because federal resources (Inputs like people, supplies, or computer equipment) are rarely used to accomplish a single outcome, it can be difficult to attribute a portion of those inputs accurately. It may also be the case that a single desired outcome is accomplished through funding from a variety of sources (multiple federal agencies, state governments, private research institutions, academia, etc.) Under these circumstances, determining the efficiency of the program may require that all these funding sources determine their relative contribution to the desired outcome.
Tools like Activity based Costing models may help managers tease out the actual costs and more accurately reflect per unit costs.

Note: Answers to effectiveness and efficiency questions can help program managers determine what strategies to use to get their job done. For example, when trying to eradicate fruit flies from a given area, program managers may need to know, "Is it better (more effective and efficient) to release sterile flies over a specific geographic area, or should the potential host plants be treated with some type of repellent? Would it be better (more effective and efficient) to release sterile flies over a smaller geographic area (where fruit fly population densities are highest) and then treat only large commercial groves in the same area?"

How does one Begin to Measure Program Effectiveness and Efficiency?

Step 1: Develop a solid, reliable way of measure the outcome or benefit (EFFECTIVENESS) of the overall program. This means developing a solid metric around effectiveness and a system for monitoring that metric. It may be useful to refer to the Program Logic Model for a clear, concise definition of the OUTCOME.

Step 2: Develop an accurate, reliable way to determine the true costs (INPUTS) associated with providing the product or service (OUTCOMES). Sometimes the complex relationships between inputs and outcomes may require using methods like Activity Based Costing (ABC) to accurately reflect "real" costs.

Step 3: Determine whether the program is COST EFFECTIVE. That is, are the benefits of the program (OUTCOMES) greater than the costs associated with providing the outcome? For example, is the value of the resource being protected (crops, herds, etc.) greater than the cost to protect it? (If the program is not cost effective, APHIS officials may have to reexamine the issue and possibly alter Agency policy or strategy.)

Step 4: Identify and "test" alternative inputs (new tools, methods, or processes) that may either improve the overall outcome (benefit) for the same costs (level of input), OR reduce the costs (inputs) for the same level of outcome (benefit).

Step 5: Quantify the level of efficiency gained by adopting these tools, methods, or processes. Sometimes it may be possible to use actual empirical data to show the increased outcome (benefit) or reduced inputs (costs). At other times it may be necessary to estimate the overall potential efficiency to be gained (for example, a new tool has been used on a limited scale, so to make this tool broadly available to all program employees, the program manager must estimate the potential cost savings if used by everyone).

Step 6: Develop a system to track and monitor program results (Outcomes or Benefits) and associated Inputs (Costs) over time.

A Word of Caution: Again, the concepts of Effectiveness and Efficiency appear to be fairly straightforward, but measuring them can be complex. APHIS' cadre of economists, statisticians, risk modelers, budget analysts, and other evaluation specialists can help program managers to develop their measurement systems. When planning such efforts, allow for an adequate amount of time to develop risk models, clarify assumptions, and quantify efficiency and effectiveness levels.